

03/16-d04 DE

CLAIMS

1. A connector (1) for connecting a dialysate port (31) of a hemodialysis machine (32) having a dialysate-carrying line

with a lumen (8, 16) passing through the connector (1),

a first end (4) of the connector (1) surrounding the lumen (8), suitable for accommodating the dialysate port (31) in the lumen (8),

a second end (5) of the connector (1) surrounding the lumen (16) and suitable for being connected to the dialysate-carrying line,

characterized in that a recess (6, 6') with a shift element (3) accommodated in the recess is provided on the first end (4),

whereby the shift element (3) is displaceable between a first position and a second position perpendicular to the direction of the lumen (8) in the first end (4),

whereby in the first position the shift element (3) does not penetrate through the lumen (8) of the first end (4), and in the second position it narrows the lumen (8) of the first end (4) so that the connector (1) with the shift element (3) is placed on the dialysate port (31) in the first position and in the second position it can be locked on the dialysate port (31) by means of an undercut (30) thereon.

2. The connector according to Claim 1, characterized

in that the connector (1) consists not only of the shift element (3) but also a base body (2), which is composed of two interconnected essentially cylindrical sleeves (4, 5) whereby the first sleeve is the first end and the second sleeve is the second end.

3. The connector according to Claim 2, characterized in that the outside diameter of the first sleeve (4) is greater than the outside diameter of the second sleeve (5).
4. The connector according to Claim 2 or 3, characterized in that the first sleeve (4) is suitable for accommodating a port according to DIN 58352.
5. The connector according to any one of Claims 2 through 4, characterized in that the lumen (8) in the first sleeve (4) has a larger diameter than the lumen (16) in the second sleeve (5).
6. The connector according to any one of Claims 2 through 5, characterized in that the connector (1) is provided with a stop (7) for the dialysis machine port (31) in the connecting area of the two sleeves (4, 5).
7. The connector according to Claim 6, characterized in that a sealing element (20) for sealing the connector (1) with respect to the dialysis machine port (31) is provided on the inside wall of the first sleeve (4) near the stop (7).
8. The connector according to any one of the preceding claims, characterized in that a constriction area (17) in the lumen (8, 16) is

provided between the first end (4) and the second end (5).

9. The connector according to any one of the preceding claims, characterized in that the recess consists of two opposite recesses (6, 6').
10. The connector according to Claim 9, characterized in that the shift element (3) has a first opening (9) which does not constrict the lumen (8) in the first end (4) in the first position and has a second opening (10) which is connected to the first opening in the direction of shifting and which constricts the lumen (8) in the first end (4) in the direction of the recesses (6, 6') in the second position.
11. The connector according to Claim 10, characterized in that the first opening (9) has a round shape and the second opening (10) has an elongated shape so that the overall shape is that of a keyhole.
12. The connector according to Claim 11, characterized in that the first opening (10) has catch projections (12, 12'), which can engage with complementary recesses (13, 13') on the first end (4) of the connector (1) for the purpose of engaging the shift element (3) in the first position.
13. The connector according to Claim 12, characterized in that the complementary recesses (13, 13') are additionally provided symmetrically on the first end (4) of the connector (1) on the opposite side of the lumen (8) in the direction of shifting.
14. The connector according to Claim 11, characterized

in that the second opening (10) is provided with an expanded opening area (14, 14') perpendicular to the direction of shifting for accommodating the dialysis machine port (31) for engagement of the shift element (3) in the second position.

15. The connector according to Claim 11, characterized in that the elongated border of the second opening (10) has a wall thickness that tapers with a slope toward the opening and has a form-fitting engagement with a corresponding slope (33) on the undercut (30) of the dialysis machine port (31).